

sharp ridges, traversed by distant spiral threads; and by the flesh-tinted orange colour.

Mangelia cerea.

M. testa M. hamata simili, sed textura cerea, aurantiaca, graciliore, anfractibus tumidioribus, haud angulatis; anfr. nucl. lævibus; normalibus v., costis radiantibus haud acutis, interstitia æquantibus; liris spiralibus validioribus, haud filosis, supra costas nodulosis, in interstitiis subobsoletis; apertura, testa adulta, ? . . . Long. .25, long. spir. .14, lat. .1, div. 28°.

Variat testa rufo-fusca.

Hab. Panama (teste *Jewett*).

Col. *Jewett*'s unique specimen is not mature. It is distinguished from *M. hamata* by the smooth nucleus, waxen texture, rounder whorls, more equal distribution of the contour between ribs and interstices, and especially by the spiral sculpture, which is faint in the hollows, but nodulose on the ribs. Mr. *Cuming* has a specimen with the same texture, but of a rich brown colour.

Chemnitzia cælata.

C. testa satis magna, cinerea, elongata; anfr. nucl. ? . . . ; norm. xiii., planatis, suturis vix impressis; costis radiantibus xx.-xxviii., rectis, haud semper convenientibus, subacutis, ad peripheriam subito truncatis; sulcis spiralibus in spira iv.-v., valde impressis, interstitia et costarum latera transeuntibus, juga haud superantibus; basi subito angustata, angulata, linulis spiralibus circ. vi. ornata; apertura subquadrata; columella satis torta. Long. .35, long. spir. .3, lat. .09, div. 13°.

Hab. West coast of North America (*Jewett*).

This beautiful and unique shell was probably from Panama; but there was no locality-mark. It is remarkable for its deep furrows and the suddenly shortened and spirally sculptured base. It is much larger and broader than the northern *C. Virgo*, and differs in details of sculpture.

XLII.—*Notices of British Fungi*. By the Rev. M. J. BERKELEY, M.A., F.L.S., and C. E. BROOME, Esq.

[Continued from p. 322.]

1038. *Ptychogaster albus*, Cd. fasc. 2. fig. 90.

On the ground, at the roots of firs. Aboyne, Aberdeenshire; Staunton, Notts. It has also been found near London by Mrs. Lloyd Wynne.

The affinities of this curious plant are very doubtful; for it does not appear to be of the creamy consistence of *Æthidium* in any stage of growth. We have no better opinion, however, to

give than that of Corda. Fries seems to think that it is a degeneration of *Polyporus destructor*.

1039. *Nidularia pisiformis*, Tul. Ann. d. Sc. Nat. 3 sér. vol. i. p. 100; Curr. l. c. figs. 5, 6, 22.

On pine chips. St. George's Hill, Weybridge, May and Oct., F. Currey.

This is *Granularia pisiformis*, Roth, a species which Mr. Currey has happily rescued from oblivion.

**Sphæropsis pinea* (*Sphæria pinea*, Desm. no. 1277).

On pine branches, F. Currey.

1040. *Dilophospora graminis*, Desm. no. 1091.

On *Alopecurus agrestis*, Mr. Currey.

In Sussex it was very destructive to a wheat crop in 1862, causing the ears to swell in a very curious manner, and to turn, in parts, of a jet-black.

1041. *Speira toruloides*, Cd. fasc. 1. fig. 140.

On dead herbaceous plants. Batheaston, C. E. Broome, 1864.

1042. *Sporidesmium abruptum*, n. sp. Pulvinatum, stipitibus brevissimis cum sporis oblongis septatis confluentibus; articulis inæqualibus.

On dead wood. Bodelwyddan, March 1864. Sent by Mr. Bloxam from Twycross.

Forming little pulvinate tufts externally resembling a villous *Sphæria*. Spores oblongo-clavate, confluent with the stem, septate; the lower articulation and the uppermost short, the second from the top very long. Spores $\cdot 0025$ inch long, $\cdot 0006$ inch wide.

PLATE XIV. fig. 8. Group of spores in various stages of growth, magnified.

1043. *Acalyptospora nervisequia*, Desm. Ann. d. Sc. Nat. 1848, vol. x. p. 343.

On living and dead leaves of elm. Apethorpe, Norths., 1857.

Looking like a short obtuse *Puccinia*, with one to three septa and a short pellucid stem. In every stage of growth free. It closely resembles a gland.

1044. *Puccinia noli-tangeris*, Cord. fasc. 4. fig. 57.

On *Impatiens fulva*. Albury, Surrey, Rev. L. Jenyns.

1045. *Uredo Padi*, Schmidt & Kze., no. 187.

On leaves of *Prunus Padus*. Aboyne, Aberdeenshire.

Sori minute, seated on a purple spot. Spores $\cdot 0006$ – $\cdot 0007$ inch long.

1046. *Trichobasis Parnassiae*, Cooke, Micr. Fung. p. 106.

On leaves of *Parnassia palustris*. Irstead Marshes, 1864.

1047. *Lecythea Poterii*, Lév. Dict. Univ. d'Hist. Nat. vol. xii. p. 786.

On leaves of *Poterium Sanguisorba*, M. C. Cooke.

1048. *Æcidium Thesii*, Desv. Journ. de Bot. ii. p. 311.

On leaves of the common *Thesium*. Hildersham, Cambridge, Rev. J. E. Leefe, May 11, 1841. Near Winchester, M. C. Cooke, 1864.

1049. *Graphiola Phœnicis*, Poiteau, Ann. des Sc. Nat. 1824, p. 473.

In the Sheffield Botanic Garden, on the Date-Palm, Sept. 5, 1861, Mr. J. Henderson.

1050. *Isaria felina*, Fr. Syst. Myc. vol. i. p. 496.

On cats' dung, near London, M. C. Cooke, Jan. 1864. Mixed with *Mucor Phycomyces*.

1051. *Fusarium heteronema*, n. s. Floccis deorsum septatis articulis amplis, sursum inarticulatis ramosis sæpe furcatis gracilibus; sporis oblongis, curvulis, uniseptatis.

On decaying pears. Batheaston, C. E. Broome, Oct. 12, 1863.

Resembling somewhat *Septosporium curvatum*, Caspary, a species which grows on the leaves of *Robinia*, but not really very closely allied. This species is sometimes accompanied by the common orange *Fusarium*, which is known at once by its very different spores.

PLATE XIV. fig. 9. Threads with spores magnified.

1052. *Helminthosporium scolecoides*, Cd. fasc. i. fig. 179.

On dead stems of some herbaceous plant. Twycross, Rev. A. Bloxam.

1053. *H. rhabdiferum*, Berk. in Gard. Chron. 1864, p. 938.

On ripe peaches. Bodelwyddan, Flintshire, Sept. 1864.

**Tripodosporium elegans*, Cd. fasc. 1. fig. 220.

This curious production sometimes occurs with globose spores at the tips of one or more of the three terminal processes, as seen by Mr. Broome, of which we think it well to give a figure, whether the plant be considered autonomous or not.

PLATE XIV. fig. 10. *a.* thread having three globose bodies or spores; *b b.* the tips and bodies more highly magnified.

1054. *Gonytrichum fuscum*, Cd. fasc. 1. fig. 160.

On dead sticks. Batheaston, C. E. Broome.

1055. *Acrothecium delicatulum*, n. s. Effusum, nigrum; floccis strictis; sporis linearibus, uni- vel pluri-septatis, hyalinis.

On dead wood, probably beech. King's Cliffe.

The spores are confined to the upper part of the stem, but not to the apex itself. Occasionally the flocci are forked. Spores .00045–.0007 inch long.

A form occurs with scattered flocci, on bramble, at Batheaston, but differing in no other respect.

PLATE XIV. fig. 11. *a.* flocci with spores magnified; *b.* spores more highly magnified.

1056. *Ædocephalum læticolor*, n. s. Minutissima, lateritia; stipite æquali, pallido; capitulo subgloboso; sporis globosis, granulatis, appendiculatis.

On sheeps' dung. Batheaston, Oct. 1863.

Not half a line high, sending out at the base a few threads into the matrix; before the head is formed, nearly cylindrical, with some large oil-globules, which at length in great measure vanish. Spores $\cdot 0006$ – $\cdot 0008$ inch in diameter, with a little appendage at the base like those of *Epicoccum*.

Three species of *Ædocephalum* are figured in No. 35, vol. vi. of St. Deutschl. Fl.

PLATE XIV. fig. 12. *a.* flocci and heads magnified; *b.* ditto, more highly magnified; *c.* portion of head with young spores, ditto; *d.* mature spores, ditto.

1057. *Peronospora sparsa*, B. in Gardeners' Chronicle, 1862, p. 308.

On rose-leaves in gardens. Extremely destructive.

1058. *P. obliqua*, Cooke, Micr. Fung. p. 160, fig. 269. Floccis brevissimis, simplicibus vel unibrachiatis; sporis oblongo-obovatis ut plurimum obliquis.

On living leaves of *Rumex*, M. C. Cooke. Sent also some years since by Dr. Montagne, under the name of *Ascomyces Rumicis*, from France, where it was gathered by Durieu de Maisonneuve.

Spores with a slight swelling towards the base, $\cdot 001$ inch long, often set on obliquely. Sometimes they give off below a second spore; and we have once seen a septum in the threads.

1059. *Septonema elongatispora*, Preuss, in St. Deutschl. Fl. 1851, vol. vi. p. 72, tab. 36.

On nettle-stems. Batheaston, Oct. 1864.

1060. *Helvella gigas*, Kromb. tab. 20.; Curr. l. c. fig. 25.

Blackheath Park, F. Currey.

**Peziza* (Helvelloideæ) *cerea*, Sow. t. 3.

This species occurred abundantly on leaves and sticks in a hothouse at Lord Lindsay's, Uffington, Lincolnshire, March 26, 1862.

1061. *P.* (Helvelloideæ) *trachycarpa*, Curr. in Linn. Trans. vol. xxiv. p. 493, tab. 51. fig. 3. Prima ætate orbicularis, fere plana, sæpissime umbilicata; disco nigro-fusco, aspero, tuberculato; extus minute granulata; sporidiis uniseriatis, globosis, muricatis.

On burnt soil. Ascot, Rev. G. H. Sawyer. (Rabenhorst, Fung. Exsicc. no. 620.)

Cups $\frac{1}{4}$ – $\frac{1}{6}$ inch broad, adpressed to the soil, substipitate or obconic. Sporidia uniseriate, globose, muricate, brown, $\cdot 0005$ – $\cdot 0007$ inch in diameter. Though the sporidia are brown under

the microscope, when thrown down on black paper they are of a whitish grey.

PLATE XIV. fig. 13. *a.* ascus with paraphysis, magnified; *b.* sporidia more highly magnified.

1062. *P.* (Helvelloideæ) *leiocarpa*, Curr. l. c. p. 493, f. 6. Cupula primum connivente, subglobosa, extus (præsertim versus marginem) aspera, fusco-vinosa, tenui, semipellucida, basin versus sæpe pallida, demum expansa, fere plana; hymenio olivaceo-fusco; sporidiis globosis, lævibus.

On burnt soil. Ascot, Rev. G. H. Sawyer, where this and the preceding species were abundant in the autumn of 1863. (Rabenhorst, l. c. no. 622.)

Cup $1\frac{1}{2}$ – $2\frac{1}{2}$ inches broad; hymenium at first pale, then dark olive-brown; sporidia uni- or biseriate, globose, perfectly even, .0003–.0004 inch in diameter.

Resembling at first *P. pustulata*, Batsch.

PLATE XIV. fig. 14. *a.* ascus with paraphysis, magnified; *b.* sporidia more highly magnified.

[To be continued.]

XLIII.—Notes on the Palæozoic Bivalved Entomostraca. No. V. Münster's Species from the Carboniferous Limestone. By T. RUPERT JONES, F.G.S., and J. W. KIRKBY, Esq.

[Plate XX.]

[Continued from vol. i. p. 257.]

THE earliest-described species of Carboniferous Bivalved Entomostraca are those of Count Münster. In 1830 a memoir by him appeared in Leonhard und Bronn's 'Jahrbuch für Mineralogie,' &c. (pp. 60–70), "On some Fossil Species of *Cypris* (Müller, Lamarck) and *Cythere* (Müller, Latreille, Desmarest)." After noticing what was then known of fossil *Cytheridæ*, the author briefly describes (pp. 62, 64) fourteen Tertiary species of *Cythere**, and proceeds (pp. 65, 66) to give similar brief descriptions of eight species that he had collected from the Carboniferous or Mountain Limestone at Regnitzlosan, near Hof, in Bavaria. This limestone, he says, is characterized by *Producti*; and "in the midst of it occurs a marly bed, oolitic in appearance, but on close examination the oolitic bodies are found to be organic remains; few of them, however, are distinct and uninjured. Among these are the *Cytheræ* here mentioned, which for the most part are found with the valves still united. Besides these, there are in the same bed remains of small Corals, *Cida-*

* These were figured and described, together with others, by Roemer, Jahrb. f. M. u. s. w. 1838, p. 514, &c., pl. 6.